IEP Tidal Wetlands Monitoring Project Work Team Contaminants subteam meeting November 4, 2016

CDFW: Stacy Sherman, Alice Low (phone)

DWR: Krista Hoffmann

SFWCA: Stephanie Fong

Regional San: Tim Mussen

CH2M Hill: Cameron Irvine

USGS (phone): Robin Stewart, Joe Domagalski

UCD: Swee The

Purpose of meeting: Discuss substantive comments made by reviewers of the contaminants-related sections of the "Tidal Wetland Monitoring Framework for the Upper San Francisco Estuary" dated25 August, 2016.

Introduction: Stacy Sherman described the rationale behind tidal wetland restoration for the benefit of listed fish species. The focus of the framework is on facilitating the development of project-specific monitoring plans that would incorporate relevant metrics feasible for long-term effectiveness monitoring. Monitoring that may be required for permit compliance (e.g. MeHg) is not explicitly considered. It was noted that the wording of the hypotheses was extensively vetted with the entire TWM PWT and would not be changed, though individual project proponents are free to modify them to better match their project objectives.

Discussion by comment number (in document titled Comments on Contaminants 5oct2016.docx):

RKH1: Hypothesis S7 does not reflect the complexity of the interaction between available organic matter and contaminant availability to organisms.

 While the hypothesis wording will not be changed, text will be added to the S7 discussion in the analysis section, including references to be sent by Tim Mussen and Robin Stewart. Jay Davis from the Bay RMP has done related work.

RKH10: Not enough guidance is given to choose the chemicals to be monitored

Links are included under the metric description of contaminant concentrations {in the
meeting we mistakenly said this was under the analysis section} pointing to lists that will be
updated (DPR's surface water monitoring prioritization model, UP3 partnership pesticides
watch list, CVRWQCB Pesticide Evaluation Advisory Workgroup, and USGS Watershed
regression for pesticides model). Add text to the first mention to see metric description for
lists.

RKH11: "Hydrologic connectivity" is too vague

- Add "in close proximity to and" – users define "close" for themselves

REC13: Input to wetland should be monitored too

- figure 4.2 addresses this, but added "entering site" to emphasize; note testing only if adverse effects detected on site

REC14-15: Why not early life stage fish and behavior

- Okay as special study (check current list), but EPA standard test organisms with known sensitivity more realistic for regular monitoring.

REC17: Hyallela fine for higher salinity

EPA recommendation Eohaustorius estuarius for brackish sediment tox tests

REC18: timing coincident with fish sampling not necessary

- Change to food web, also add sentence specifying as conditions become established, rather than immediately after construction if soils not stabilized.

RECxx: several other comments

- Most more appropriate as special studies

General comments:

- Would be helpful to have contaminant-specific flow chart to explain what types of monitoring may be warranted.
- Benthic fish and early life stage most appropriate as resident fishes for contaminants testing; even silversides move around too much
- When speak of testing fish tissue, advise to use tissues appropriate to question
- Table 4.4 is not complete; Krista will help to draft
- Check special studies table for general coverage